



STATIC
SYSTEMS
GROUP

Supporting our
NHS

Case Study

The Royal London Hospital

Static Systems Group helps the largest critical care facility in the capital get ready for COVID.

In just 18 days and ahead of schedule, Static Systems Group designs, builds and installs nurse call and bedhead trunking for a brand new 176-bed Critical Care Unit.

Overview

Based in east London, The Royal London Hospital is a world-renowned teaching hospital offering a full range of local and specialist services. It is one of the largest children's hospitals in the UK and has one of London's busiest paediatric accident and emergency departments.

Home to London's Air Ambulance, The Royal London is also one of the capital's leading trauma and emergency care centres and hyper-acute stroke centres. The hospital is operated by Bart's Health NHS Trust.

SSG has a longstanding relationship with the Trust, having been their preferred nurse call provider for more than 40 years. The company's bedhead trunking, nurse call and fire alarm systems are used throughout both The Royal London and St Bartholomew's Hospital.

In March 2020, in order to prepare for the predicted rapid rise in the number of COVID-19 cases, the Trust made the decision to fit out a brand new 176-bed Critical Care Unit in an area spanning the 14th and 15th floors of the hospital which had been left at shell and core at the time of the PFI scheme handover in 2012.

SSG was one of a number of specialist sub-contractors brought on board to fit out the new Critical Care Unit from scratch in just five weeks in order to have the new facility ready to accept patients from 1st May 2020. SSG was appointed by one of the project's M&E contractors, ABCA Systems Ltd, to install the unit's nurse call system and bedhead services trunking, and to provide a fire alarm interface between the unit's new fire alarm system and the existing SSG site-wide fire alarm network.



SSG has a longstanding relationship with the Trust, having supplied bedhead trunking, nurse call and fire alarm systems throughout both The Royal London and St Bartholomew's Hospital.

Our challenge

The main challenge on this project was to design and manufacture all of the nurse call and bedhead services trunking equipment in an extremely short space of time to enable onsite mobilisation in a working hospital.

An order was received at the end of March and SSG was advised that all systems had to be operational by the 1st May. Within a week or so of getting the drawings approved by ABCA Systems Ltd and the Trust, the first fix equipment was on site.

A project of this type would typically take around eight or nine months to complete, but the SSG team completed the works in just 18 days, working from 7am-7pm every day, including weekends, to build, install and test the nurse call system and bedhead services trunking on site. Some of the company's engineers worked away from home for the duration of the works.

To add to the challenge of meeting the tight project deadline, the design for the unit was constantly evolving which meant we had to adjust our designs for the nurse call system and bedhead trunking while on site.

Furthermore, works had to be aligned and operate in conjunction with all the other suppliers and contractors working under pressure on the project, which proved challenging at times.



+44 (0) 1902 895 551
www.staticsystems.co.uk

SSG ref: 583 (05/2020)



At the beginning of the Covid-19 Pandemic the Trust made the decision to fit out a brand new 176-bed Critical Care Unit spanning the 14th and 15th floors of the hospital.

Our approach

SSG was heavily involved in the early design stages of the project. A team of eight of our engineers worked on the scheme, including, a site supervisor and a project manager.

The Trust originally specified a wireless nurse call system for this project, but following further discussions with ABCA Systems Ltd and TB&A (Troup Bywaters + Anders) – who produced the design concept for the Critical Care Unit and were the Trust's appointed technical advisors on this project – SSG recommended the Ultima™ Full IP, Power-over-Ethernet (PoE) nurse call system as it would offer the Trust greater longevity and greater flexibility due to its fully open protocol and industry-standard architecture.

Ultima is a robust solution utilising distributed intelligence with no single point of failure. It is designed to meet international Ethernet and networking standards, allowing seamless integration with many different technologies, including medical gas alarms, fire alarms, BMS, entertainment systems, lighting systems and many other services. Other features include real-time fault monitoring, the option to incorporate VoIP speech where required for improved workflow efficiency and convenience, and the ability for engineering teams to undertake 'live' working with minimal disruption.

The patient hand units supplied as part of the Ultima nurse call system contain the Biomaster silver-based antimicrobial agent which is incorporated during the manufacturing process to help further strengthen the infection control measures instigated by the hospital in the new unit.

A flexible bedhead services solution

When it came to supplying the bedhead services trunking for this project SSG was given a sketch from TB&A with regards to the type and number of services required within the trunking, including the ▶



This extremely rapid deployment was only made possible due to the excellent co-operation and communication between all members of the SSG project team. Everyone from our factory and manufacturing teams through to our stores, CAD engineers, technical services department and our onsite installation team worked brilliantly together in order to get this challenging project delivered on time. Our collaborative approach to working with ABCA Systems Ltd, one of the main contractors on the project, worked really well and the project also benefitted from our knowledge and experience of previous similar schemes. We managed to have the systems installed, tested and commissioned ready for handover on 27th April, four days ahead of schedule.”

Chris Meilak, Project Manager on the Royal London COVID-19 Project



+44 (0) 1902 895 551
www.staticsystems.co.uk

SSG ref: 583 (05/2020)



STATIC
SYSTEMS
GROUP



Ventura™ provides a truly flexible solution for use in all healthcare environments.

number of gas outlets, number of twin socket outlets, data outlets, lighting switches and the nurse call. SSG then had to come up with a solution and chose to use its Ventura range.

Ventura™ provides a truly flexible solution for use in all healthcare environments. Its innovative design makes it suitable for a wide range of applications – from high dependency units requiring heavily populated systems and services, through to the less demanding requirements of a general acute medical ward or day care unit. Additional features have been included for ease of installation and servicing. The modular design allows the required number of horizontal sections to be locked together and, once installed, additional sections can be simply added if requirements change.

At The Royal London, the services were originally going to be delivered in a cavity wall behind the bedhead, but the Trust decided against having a cavity wall as they didn't want to block the windows. Instead, all services had to be surface mounted onto the walls with a riser to each individual bed's trunking. SSG had to adapt to these evolving changes in the Trust's requirements and, following feedback from ABCA contractors, came up with a trunking design that worked for the Trust.

SSG was also commissioned to interface the new unit's fire alarm system – a third party system installed by ABCA Systems Ltd – onto the site-wide fire alarm network, provided previously by SSG.

Familiarity with the systems is a great operational benefit

Robert O'Shea, Senior Manager at Bart's Health NHS Trust, comments: "Our new Critical Care unit at The Royal London is now the largest critical care facility in London, offering world-class facilities in a world-renowned hospital. It forms a vital part of our collective North East London response in providing critical care for our population and will continue to play a key role in protecting people and saving lives across London once this current crisis is over. We are delighted

that SSG's nurse call and bedhead services trunking have been installed in our new unit. We know from past experience that the systems are robust, reliable and easy to use for patients and staff alike. Our staff are already very familiar with the systems as they are in place throughout the rest of the hospital, which is a great operational benefit."

SSG will continue to provide ongoing service and maintenance for the whole Royal London Hospital site as part of a scheduled care contract. TB&A will also continue to support the Trust on day-to-day matters.

Watch video:

[The Royal London Hospital 14/15th floor expansion - YouTube](#)



This is the first time that we have worked with the team at SSG and we certainly hope it won't be the last. Nothing was too much trouble.

I would like to thank the team for their 24/7 support and dedication to the project, which ensured the delivery was compliant and completed early against all the odds. Hopefully we can all team up again in the future."

Elliott Lawrence, Director at ABCA Systems Ltd



+44 (0) 1902 895 551
www.staticsystems.co.uk

SSG ref: 583 (05/2020)



**STATIC
SYSTEMS
GROUP**